

**AMENDMENTS TO THE SPECIFICATION**

**Please replace paragraph 2 on page 1 with the following amended paragraph:**

Such service provider is already known in the art, e.g., from the European Telecommunication Standards Institute Standard ~~at the internet site with the address:~~ with reference TR 22.70 V3.0.0 (1998-03) entitled "Universal Mobile Telecommunication System (UMTS); Service Aspects; Virtual Home Environment (VHE) (UMTS 22.70 version 3.0.0).

**Please delete paragraph 3 on page 1.**

**Please delete paragraph 4 on page 1.**

**Please replace paragraph 1 on page 2 with the following amended paragraph:**

The components involved in realization of a virtual home environment of a user are the following: one user, one service provider, one or more value added service providers i.e., content providers of services such as video on demand or entertainment information provider, one USIM i.e., unique personal identification of the user, one IC card, one subscriber, one subscription of the subscriber to the above mentioned service provider, one or more terminals, one or more network operators.

**Please replace paragraph 2 on page 3 with the following amended paragraph:**

Presume a universal personal telecommunication network which includes a subnetwork. According to the virtual home concept a user, being identified with its personal identification number is associated to one service provider, called its home service provider. The home service provider provides a virtual home environment according to the subscription of the user. Presume that this home service provider has a commercial relationship with this subnetwork e.g., a mobile subnetwork, called hereafter a home subnetwork. The home subnetwork is attached to the home service provider. Furthermore, presume that the home service provider offers access for all its subscribers to a list of services e.g., hotel information, roadmap information, flight information of the airport, restaurant information, etc.

**Please replace paragraph 3 on page 3 with the following amended paragraph:**

In the event that the user desires to get access to the personal telecommunication network, the user submits an access request via a terminal e.g., its mobile telephone and via the home subnetwork to the universal personal telecommunication network. The home service provider provides a notification to the user which includes the capability for the user to accept the list of services of its home service provider. In this way, the user can select this offered service and, furthermore, can select e.g., the offered hotel information.

**Please replace paragraph 7 on page 3 bridging page 4 with the following amended paragraph:**

Indeed, an interworking between the two subnetworks is required as well as the permission for the user to get access to the telecommunication network via another subnetwork. When the user, at the destination of its journey, makes an access request with its mobile telephone to the telecommunication network, the access is requested via this other subnetwork i.e., a mobile network, called hereafter access subnetwork. Due to the existing interworking between the access subnetwork and the home subnetwork the profile of the user can be checked. When the profile of the user permits access via this access subnetwork, the home service provider of the user provides a notification to the user which includes the capability for the user to accept the list of services of its home service provider. In this way, the user can select this offered service and, furthermore, can select e.g., the offered hotel information. However, the offered hotel information is mostly information of the local environment of its home service provider e.g., the coverage area of the home subnetwork.

**Please replace paragraph 4 on page 4 bridging page 5 with the following amended paragraph:**

Indeed, by including in the method the step of providing by a notifying service provider to the user via an access subnetwork, i.e., the subnetwork via which the user requests access to the telecommunication network, a notification which includes a capability to accept a service of

an offered service provider, a virtual visited environment is offered to the user. Such a virtual visited environment is similar to a virtual home environment but is identified by the user and the offered service provider, which can be e.g., totally different of its home service provider. In this way, the concept virtual visited home environment, is offered to the user. Such a virtual visited home environment offers to the user the same way and feel independent of the terminal and the network in use, over both fixed and mobile access networks, and on different type of terminals varying from simple voice only terminals to powerful laptops. It has to be understood that similar as to the user profile as defined in the above mentioned standard for the virtual home environment, also a visited user profile has to be defined. Usually, such a visited user profile will be more restricted as compared with a general home user profile. On the other hand, such a visited user profile might offer alternative payment methods which offers, once fulfilled, the possibility to select a broader list of services.

**Please replace paragraph 2 on page 5 with the following amended paragraph:**

An advantage of such a universal personal telecommunication network which includes a plurality of service providers whereof each one of the service provider includes a notifying means to provide such a notification to the user, is that a user can go anywhere in the area of the telecommunication network i.e., the area covered by the subnetworks being associated to anyone of the plurality of service providers, and upon requesting access to the telecommunication network via one of these subnetworks, called access subnetwork, the user is enabled to accepts a

service of anyone of these service providers, called offered service provider, which is offered by anyone of these service providers, called notifying service provider.

**Please replace paragraph 2 on page 6 with the following amended paragraph:**

Another possible implementation is that, in the event when the service provider according to the invention i.e., the notifying service provider being associated to the access subnetwork, is also constituted by the offered service provider. This is described in claim 4 and brings us in the situation, if referring to the above mentioned example of the service of hotel information, that the service provider associated to the accessed subnetwork, at a visited location, is enabled to offer its own services to users which are visiting its area. The offered hotel information will be information of the local hotels. It has to be remarked that the service is offered by the service provider, even when no interworking between the access subnetwork and the home subnetwork is established and even more, also when the user has no home subnetwork at all. Indeed, the offered services by the offered service provider might be free of charge or on the other hand might include possibilities to pay e.g., with credit\_cards in order to get access to more services which are not free of charge anymore.

**Please replace paragraph 3 on page 6 with the following amended paragraph:**

Yet, another possible implementation is similar to the above paragraph, but differs that the offered service provider is different of the notifying service provider. This brings us in the

situation that the notifying service provider, being associated to the access subnetwork, provides a notification which includes the capability to the user to accept a service of a related service provider e.g., the service provider whereto a neighboring subnetwork is associated but with which a commercial agreement is established. In the event when such an offered service provider is the home service provider, the service provider of the invention provides the notification to the user to accept the services of its offered home service provider or not. This is described in claim 5.

**Please replace paragraph 1 on page 7 with the following amended paragraph:**

Another possible implementation is, still in the situation that the notifying service provider is associated to the access subnetwork, that the notifying service provider is also the home service provider of the user. This brings us in the situation that a user which requests access in its home area i.e., the area of its home subnetwork, receives a notification of its home service provider which includes the capability to the user to accept, besides the services of its home service provider, also the services of other service providers e.g., service providers which are associated with neighboring subnetworks. In this way, again following the example of hotel information, the user is enabled to accept from its home service provider, the service of the service provider of the area which he is going to visit and to inquire the information of the hotels of the visited area in advance. This is described in claim 6.

**Please replace paragraph 3 on page 7 with the following amended paragraph:**

~~Finally~~Finally it is described in claim 8 that, similar to the above situation, the offered service provider is associated to the access subnetwork. Indeed, the user being in a visited location and requesting access via an access subnetwork which is not its home subnetwork, receives a notification, via a home subnetwork associated to its home service provider and via the access subnetwork, which includes the capability to accept the services of the local visited service provider. Again, the user is enabled to accept the service of this local service provider and to select the information of the local hotels.

**Please replace paragraph 4 on page 7 bridging page 8 with the following amended paragraph:**

The above and other objects and features of the invention will become more apparent and the invention itself will be best understood by referring to the following description of a not limiting embodiment taken in conjunction with the accompanying drawings wherein the Figure 4 illustrates the system concept of a virtual home environment of a user and a virtual visited environment for this user.

**Please replace paragraph 2 on page 8 with the following amended paragraph:**

In a universal personal telecommunication network a user U is associated to its subscriber and its home service provider SP-H. A virtual home environment VHE is a system concept which provides personal service portability across network ~~boards~~borders and between terminals. The concept virtual home environment is such that the user U is consistently presented with the same personalized features, user interface capabilities and services in whatever network and whatever terminal, wherever the user may be.

**Please replace paragraph 3 on page 8 with the following amended paragraph:**

The Figure shows this virtual home environment concept VHE for a user U. A subscriber (not shown in the Figure) has an commercial agreement i.e., a subscription with the home service provider SP-H. The subscriber authorizes to user U to use some predefined services under this commercial agreement. Presume that this service provider SP-H is located in Antwerp. The home service provider SP-H has one or more relations with network operators. The Figure shows a relation between the home service provider of user U and :



**Please replace paragraph 4 on page 9 with the following amended paragraph:**

- the second plurality of mobile subnetworks SUB-M2-H and another service provider i.e., SP-V, located in Milan, and called hereafter the visited service provider which will be explained in a further paragraph;

**Please replace paragraph 7 on page 9 with the following amended paragraph:**

The relation between the visited service provider SP-V and the second plurality of fixed subnetworks SUB-F2 is mentioned e.g., in order to illustrate that the mentioned relations are not limitative and that still other relations (not shown) are possible between service providers and subnetworks.

**Please replace paragraph 2 on page 10 with the following amended paragraph:**

-in the event when a user, which is associated to one of the two service providers being its home service provider e.g., SP-H, requests access via a subnetwork e.g., SUB-M2-H which also has a commercial relation with the other service provider e.g., SP-V, the notifying service provider is constituted with the home service provider SP-H and besides its own services, the notifying service provides a notification to the user which includes a capability to accept a service of the other service provider SP-V which constitutes thereby the offered service provider. This agreement means that as well the home service provider SP-H as the visited service

provider must be able to fulfill the notification according to the invention. Indeed, in the event of a second user (not shown) being associated to the visited service provider as its home service provider, the roles of notifying service provider and offered service provider are exchanged between both service providers SP-H and SP-V.

**Please replace paragraph 3 on page 10 with the following amended paragraph:**

In order to execute the notification according to the invention each service provider SP-H and SP-V includes a notifying means, i.e., NOT, to provide a notification to a user. Such a notifying means includes in fact the capability to open to a user the door to another service provider i.e., the offered service provider. It has to be understood that this requires the necessary information at the notifying service provider to identify and to establish a communication between the user and the offered service provider.

**Please replace paragraph 1 on page 11 with the following amended paragraph:**

Presume the situation as above described. A user with its home service provider in Antwerp which is associated with three plurality of subnetworks SUB-F1-H, SUB-M1-H and SUB-M2-H covering the area of Belgium, Belgium and Italy respectively. In the event when the user U travels to Milan and desires to require hotel information of the local place, i.e., Milan, he first executes an access request R to the universal personal telecommunication network, via its mobile telephone T and via the mobile telephone network of the environment i.e., subnetwork

SUB-M2-H. It has to be remarked that following the invention this subnetwork SUB-M2-H is defined as the access subnetwork. This access subnetwork is associated to the service provider in Milan SP-V which is defined hereby as the visited service provider. The subnetwork SUB-M2-H and the visited service provider SP-V are defining together a virtual environment.

**Please replace paragraph 2 on page 11 with the following amended paragraph:**

Due to the personal identification number of the user U, the service provider SUB-M2-H knows that the user U has its subscription via a subscriber with the service provider SP-H in Antwerp i.e., the home service provider. On the other hand, the fact that the access request is entered via the access subnetwork SUB-M2-H which has also a relation with the service provider in Milan SP-V i.e., the visited service provider and due to the commercial agreement between the home service provider SP-H and the visited service provider SP-V, the home service provider SP-H creates a notification in its notifying means and provides this notification N(SP-V) via the access subnetwork SUB-M2-H to the user U. This notification N(SP-V) includes a capability to accept a service of an offered service provider which is in this case the visited service provider SP-V. The offered service is the virtual visited environment identified by the user and the visited service provider SP-V. The user accepts this offered service and receives services in line with the subscription of the visitor profile. The services offered by the offered service provider are restricted following the subscriptions of the visitor profile. However, as it is mentioned above, a

list of the hotels of Milan is offered free of charge to the visited user whereby the user is enabled to make an inquire of this list.

**Please replace paragraph 1 on page 12 with the following amended paragraph:**

It has to be remarked that although in the preferred embodiment a mobile telephone has been chosen as the terminal via which the user communicates, the application of the invention is not limited to only mobile telephone sets. Indeed, as explained following the system concept of a virtual home environment and similar following the system concept of a virtual visited environment, small modifications evident to a person skilled in the art, may be applied to the above described embodiment in order to adapt it to be integrated with other kind of terminals e.g., a portable personal computer or a mobile telephone set integrated in a car.